

**Community Hospital Emergency Departments Admissions for
Persons Diagnosed with a Mental Illness, Developmental Disability
or Substance Abuse Disorder**

**Second Quarter SFY 2009-10
October - December, 2009**

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Executive Summary

This report responds to North Carolina General Statute 112C-147.1.1 Section 10.49(r) which requires the Department of Health and Human Services to report on community hospital emergency department admissions of individuals with mental health, developmental disabilities, and substance abuse diagnoses. This report covers admissions for the second quarter of State Fiscal Year 2009-2010 (October – December 2009).

Between October 1 and December 31, 2009, a total of 1,059,590 emergency department admissions were reported by 111 of the 112 community hospitals in the state. Of this number, 138,014 (13.0%) admissions had a primary or secondary diagnosis related to mental health, developmental disabilities or substance abuse. Of these MH/DD/SA admissions, 32,489 had a primary diagnosis and 105,525 had a secondary diagnosis in one or more of these three disability groups.

- Of the admissions with a primary MH/DD/SA diagnosis, 71.8% (23,340) had a mental health diagnosis, 3.0% (965) had a developmental disabilities diagnosis, and 25.2% (8,184) had a substance abuse diagnosis.
- The number of admissions with a primary MH/DD/SA diagnosis were almost evenly split between females (16,405) and males (16,084). However, gender differences in admissions were observed across the three disability groups. A higher percentage of females (81.4%) had a mental health primary diagnosis than was the case for males (62.1%). A higher percentage of males (34.1%) had a substance abuse primary diagnosis than was the case for females (16.5%). The percentage of females and males with a primary diagnosis of developmental disabilities was 2.2% and 3.8% respectively.
- Most emergency department admissions for individuals with a primary MH/DD/SA diagnosis involved adults -- 89.3% (29,023) were adults and 10.7% (3,466) were children. Differences related to the primary diagnosis were noted for these two age groups. A higher percentage of child admissions (16.4%) had a primary diagnosis of developmental disabilities than was the case for adults (1.4%), while a higher percentage of adult admissions (27.3%) had a primary diagnosis of substance abuse than was the case for children (7.2%). The percentage of admissions with a mental health related primary diagnosis was about the same for children (76.5%) and adults (71.3%).
- There was a wide variation in emergency department admission rates for individuals with a primary or secondary MH/DD/SA diagnosis across the state's Local Management Entities (LMEs) and counties. For mental health diagnoses, admission rates across LMEs ranged from 20.1 to 220.2 admissions per 10,000 population. For developmental disabilities diagnoses, admission rates for LMEs ranged from 8.4 to 16.0 admissions per 10,000 population, and for substance abuse diagnoses, admission rates for LMEs ranged from 31.6 to 54.4 admissions per 10,000 population. There was also considerable variation in admission rates across counties ranging from 38.1 to 317.1 admissions per 10,000 population for all three diagnosis groups combined.
- Disposition data was available for 97% of admissions with a primary or secondary MH/DD/SA diagnosis. Overall, one-third (33.4%) of emergency department admissions were admitted to the hospital (ICU, Psych Unit, or Other Unit). Almost three-fifths (58.0%) of emergency department admissions were discharged from the emergency department. The remaining 8.6% of emergency department admissions had another disposition (e.g. transferred, left AMA or without advice, died, other, or unknown).

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Introduction

This report focuses on community hospital emergency department admissions diagnosed with mental health, developmental disabilities, or substance abuse disorders. The report is in response to General Statute 112C-147.1.1 Section 10.49(r). The data in this report was gathered October 1 – December 31, 2009 (the 2nd quarter of State Fiscal Year 2009-10) by 111 of the 112 community hospitals across the state. These hospitals are listed in Appendix A.

Admissions and disposition data were recorded with the North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT). General information on this tool can be found in Appendix B. ICD-9 codes were used to specify primary and secondary diagnoses for mental health, developmental disabilities, and substance abuse disorders. These codes are listed in Appendix C. The International Statistical Classification of Diseases and Related Health Problems (most commonly known by the abbreviation ICD) provides codes to classify diseases and a wide variety of signs, symptoms, abnormal findings, complaints, social circumstances and external causes of injury or disease.

NC-DETECT data from the hospitals was compiled into a centralized database, and selected parts of it were extracted, aggregated, and sent to the Division of Mental Health, Developmental Disabilities and Substance Abuse Services (DMH/DD/SAS) for this report, through a data sharing agreement with the Division of Public Health.

The aggregate data included the total number of admissions as well as the number of admissions diagnosed with mental health problems, developmental disabilities, and/or substance abuse disorders. The latter included primary and secondary or co-occurring ICD-9 diagnostic codes, recorded at the time of admission, using the NHAMCS 2005 Emergency Department Data Summary classification system.

The aggregate data included the following basic demographic information on admissions: 1) whether the admission was a child (under age 18) or an adult (age 18 and over); 2) whether the admission was a female or a male; 3) county of residence; and 4) the Local Management Entity (LME) in which the admission occurred.

Statewide MH/DD/SA Admissions

From October 1 to December 31, 2009, 1,059,590 admissions were reported by emergency departments in North Carolina community hospitals. Of this number, 32,489 (3%) had a primary diagnosis of a mental health, developmental disabilities, or substance abuse disorder. An additional 105,525 (10%) had a secondary diagnosis of a mental health, developmental disabilities, or substance abuse disorder.

Figure 1 shows the percentage of admissions with a primary diagnosis of mental health, developmental disabilities, or substance abuse in each diagnostic group. The data shows that 71.8 % (23,340) had a mental health diagnosis, 3.0% (965) had a developmental disabilities diagnosis, and 25.2 % (8,184) had a substance abuse diagnosis.

Figure 1: Admissions by MH/DD/SA Diagnostic Groups

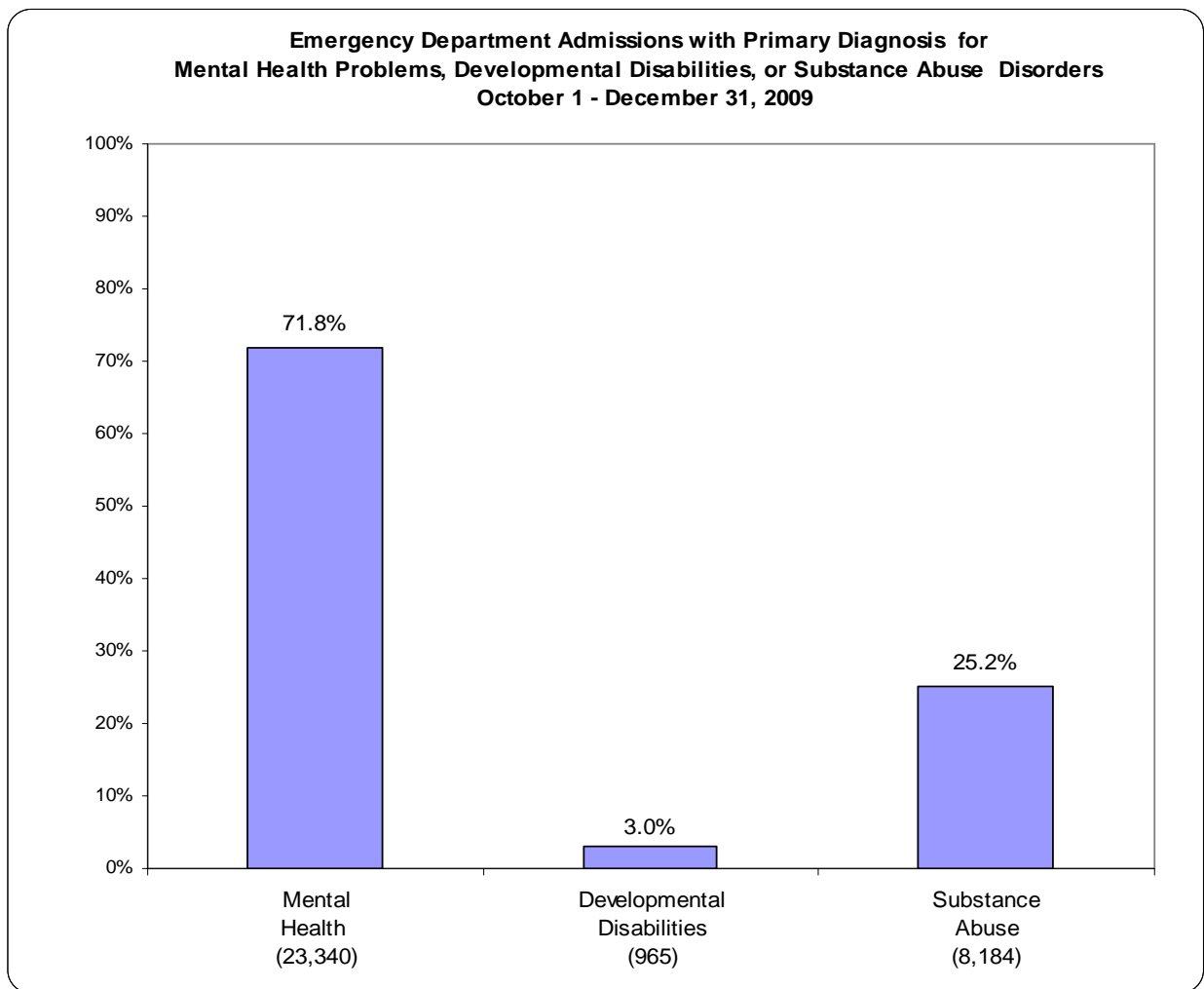


Figure 2 shows data on the gender of persons admitted with a primary diagnosis of mental health, developmental disabilities, or substance abuse. Overall, those admissions were almost evenly split between females (16,405) and males (16,084). However, there were gender differences in admissions across the three diagnostic groups. For example, a higher percentage of females (81.4%) had a mental health primary diagnosis than males (62.1%). Alternatively, a higher percentage of males (34.1%) had a substance abuse primary diagnosis than females (16.5%). The percentage of females (2.2%) and males (3.8%) with a primary diagnosis of developmental disabilities was similar.

Figure 2: Gender of MH/DD/SA Admissions

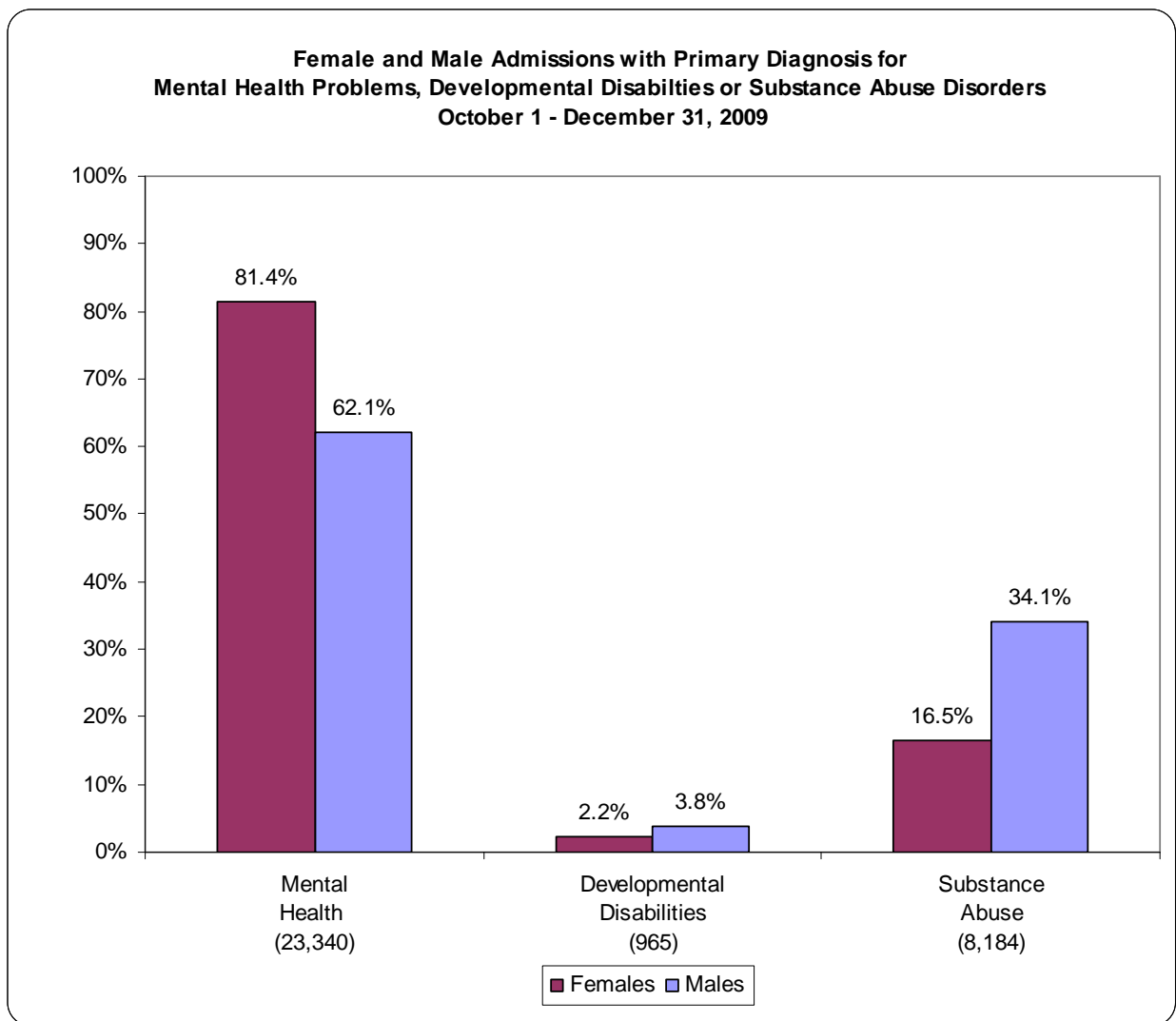


Figure 3 displays data on children and adults admitted with a primary diagnosis of mental health, developmental disabilities, or substance abuse. Overall, 10.7% (3,466) were children and 89.3% (29,023) were adults. The data shows differences in the primary diagnosis for children and adults. A higher percentage of child admissions (16.4%) had a primary diagnosis of developmental disabilities than adults (1.4%) while a higher percentage of adult admissions (27.3%) had a primary diagnosis of substance abuse than children (7.2%). The percentage of admissions with a mental health related primary diagnosis was about the same for children (76.5%) and adults (71.3%).

Figure 3: Child and Adult MH/DD/SA Admissions

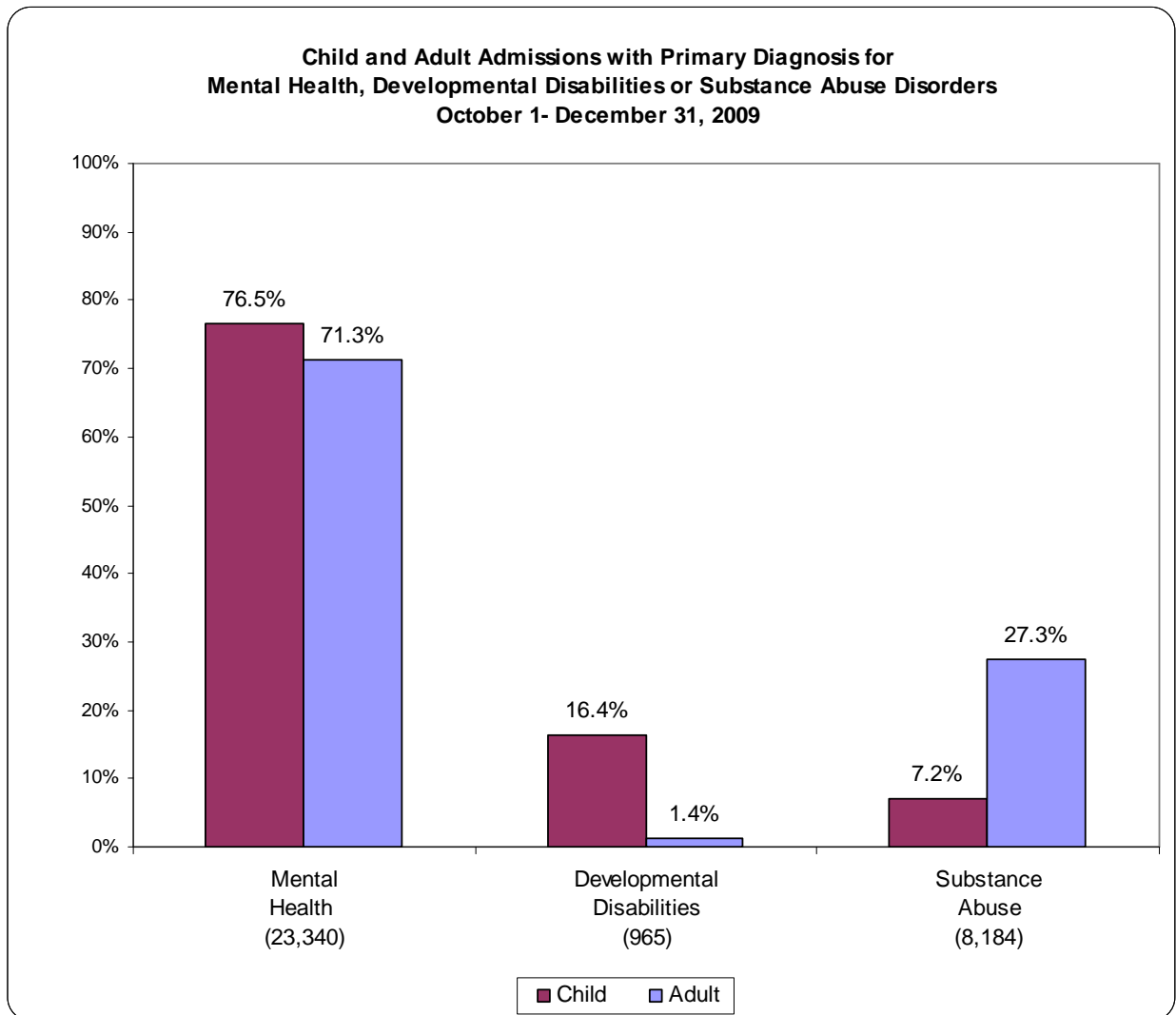


Table 1 displays data for each LME's service area on the number of child and adult admissions with a primary or secondary diagnosis of mental health, developmental disabilities, or substance abuse.

**Table 1: Child and Adult Admissions with a Primary or Secondary
Mental Health, Developmental Disabilities or Substance Abuse Diagnosis
By Local Management Entity (LME)
October 1 - December 31, 2009**

LME	Mental Health			Developmental Disabilities			Substance Abuse			Grand Total
	Child	Adult	Total	Child	Adult	Total	Child	Adult	Total	
Alamance-Caswell ¹	205	2,909	3,114	143	137	280	12	983	995	4,389
Albemarle	130	1,774	1,904	70	80	150	14	515	529	2,583
Beacon Center	185	1,987	2,172	106	84	190	16	815	831	3,193
CenterPoint ¹	293	4,166	4,459	141	171	312	33	1,319	1,352	6,123
Crossroads	233	3,132	3,365	108	124	232	11	661	672	4,269
Cumberland	440	2,963	3,403	194	159	353	18	1,345	1,363	5,119
Durham	140	1,956	2,096	111	126	237	17	854	871	3,204
East Carolina	303	4,646	4,949	160	193	353	28	1,571	1,599	6,901
Eastpointe	313	3,269	3,582	185	173	358	28	1,255	1,283	5,223
Five County ²	127	2,046	2,173	57	57	114	*	678	678	2,965
Guilford	130	2,259	2,389	51	53	104	15	1,003	1,018	3,511
Johnston	164	1,530	1,694	81	66	147	24	427	451	2,292
Mecklenburg	363	5,977	6,340	191	324	515	48	2,285	2,333	9,188
Mental Health Partners	222	3,689	3,911	112	116	228	18	967	985	5,124
Onslow-Carteret	523	2,840	3,363	158	197	355	28	834	862	4,580
O-P-C	167	1,777	1,944	99	102	201	31	680	711	2,856
Pathways	651	7,826	8,477	325	290	615	54	2,040	2,094	11,186
Piedmont	628	6,308	6,936	323	266	589	54	1,682	1,736	9,261
Sandhills Center	451	5,777	6,228	239	226	465	55	1,848	1,903	8,596
Smoky Mountain ²	368	4,979	5,347	155	166	321	*	1,483	1,483	7,151
Southeastern Center	255	3,512	3,767	118	146	264	13	1,188	1,201	5,232
Southeastern Regional	225	3,211	3,436	138	99	237	12	1,299	1,311	4,984
Wake	542	6,583	7,125	303	432	735	44	1,766	1,810	9,670
Western Highlands	383	7,571	7,954	184	356	540	35	1,564	1,599	10,093
Statewide	7,441	92,687	100,128	3,752	4,143	7,895	608	29,062	29,670	137,693

Notes

1. The data provided does not reflect the change effective July 2009 when Rockingham County moved from Alamance-Caswell-Rockingham to CenterPoint. This will be corrected in future reports.
2. An asterisk (*) indicates the number was 10 or less. The actual number was redacted from the data that was provided for privacy protection reasons.

MH/DD/SA Admission Rates by LME

Tables 2 through 4 present data on admission rates for each Local Management Entity (LME) for emergency department admissions with a primary or secondary diagnosis of mental health, developmental disabilities, or substance abuse.

These tables show for each LME the number of admissions that occurred during the quarter, population estimates at the beginning of the state fiscal year, and the admission rate (number of admissions per 10,000 population) for admissions with a primary or secondary diagnosis related to mental health, developmental disabilities, or substance abuse.

The data in these three tables are sorted by admission rate (highest to lowest). There was considerable variation in admission rates across the LMEs. For mental health diagnoses, admission rates ranged from 20.1 to 220.2 admissions per 10,000 population. For developmental disabilities diagnoses admission rates ranged from 8.4 to 16.0 admissions per 10,000 population, and for substance abuse diagnoses, admission rates ranged from 31.6 to 54.4 admissions per 10,000 population.

**Table 2: Admission Rates for Individuals with a Primary or Secondary
Mental Health Diagnosis, by Local Management Entity
October 1 - December 31, 2009**

LME	Population²	Admissions	Rate Per 10,000 Population
Pathways	384,960	8,477	220.2
Mental Health Partners	247,410	3,911	158.1
Western Highlands	507,121	7,954	156.8
Onslow-Carteret	242,062	3,363	138.9
Southeastern Regional	256,296	3,436	134.1
Crossroads	270,755	3,365	124.3
East Carolina	404,274	4,949	122.4
Eastpointe	294,211	3,582	121.7
A-C-R¹	264,621	3,114	117.7
Sandhills Center	547,102	6,228	113.8
Cumberland	319,883	3,403	106.4
Southeastern Center	355,050	3,767	106.1
Albemarle	182,541	1,904	104.3
Smoky Mountain	522,576	5,347	102.3
CenterPoint¹	438,266	4,459	101.7
Johnston	168,825	1,694	100.3
Piedmont	739,735	6,936	93.8
Five County	234,180	2,173	92.8
Beacon Center	248,084	2,172	87.6
O-P-C	231,244	1,944	84.1
Wake	900,342	7,125	79.1
Durham	267,492	2,096	78.4
Mecklenburg	894,219	6,340	70.9
Guilford	476,831	2,389	50.1
Total	9,398,080	100,128	106.5

Notes

1. The data provided does not reflect the change effective July 2009 when Rockingham County moved from Alamance-Caswell-Rockingham to CenterPoint. This will be corrected in future reports.

2. Source: July 2009 Projected Population, NC Office of State Budget and Management (OSBM), State Demographics Branch website: http://www.osbm.state.nc.us/demog/countytotals_singleage_2009.html. Last Update: April 24, 2009. Downloaded 7/31/09.

**Table 3: Admission Rates for Individuals with a Primary or Secondary Diagnosis of Developmental Disabilities, by Local Management Entity
October 1-December 31, 2009**

LME	Population²	Admissions	Rate Per 10,000 Population
Pathways	384,960	615	16.0
Onslow-Carteret	242,062	355	14.7
Eastpointe	294,211	358	12.2
Cumberland	319,883	353	11.0
Western Highlands	507,121	540	10.6
A-C-R ¹	264,621	280	10.6
Southeastern Regional	256,296	237	9.2
Mental Health Partners	247,410	228	9.2
Durham	267,492	237	8.9
East Carolina	404,274	353	8.7
Johnston	168,825	147	8.7
O-P-C	231,244	201	8.7
Crossroads	270,755	232	8.6
Sandhills Center	547,102	465	8.5
Albemarle	182,541	150	8.2
Wake	900,342	735	8.2
Piedmont	739,735	589	8.0
Beacon Center	248,084	190	7.7
Southeastern Center	355,050	264	7.4
CenterPoint ¹	438,266	312	7.1
Smoky Mountain	522,576	321	6.1
Mecklenburg	894,219	515	5.8
Five County	234,180	114	4.9
Guilford	476,831	104	2.2
Total	9,398,080	7,895	8.4

Notes

1. The data provided does not reflect the change effective July 2009 when Rockingham County moved from Alamance-Caswell-Rockingham to CenterPoint. This will be corrected in future reports.

2. Source: July 2009 Projected Population, NC Office of State Budget and Management (OSBM), State Demographics Branch website: http://www.osbm.state.nc.us/demog/countytotals_singleage_2009.html. Last Update: April 24, 2009. Downloaded 7/31/09.

**Table 4: Admission Rates for Individuals with a Primary or Secondary Diagnosis of Substance Abuse, by Local Management Entity
October 1 - December 31, 2009**

LME	Population²	Admissions	Rate Per 10,000 Population
Pathways	384,960	2,094	54.4
Southeastern Regional	256,296	1,311	51.2
Eastpointe	294,211	1,283	43.6
Cumberland	319,883	1,363	42.6
Mental Health Partners	247,410	985	39.8
East Carolina	404,274	1,599	39.6
A-C-R ¹	264,621	995	37.6
Onslow-Carteret	242,062	862	35.6
Sandhills Center	547,102	1,903	34.8
Southeastern Center	355,050	1,201	33.8
Beacon Center	248,084	831	33.5
Durham	267,492	871	32.6
Western Highlands	507,121	1,599	31.5
CenterPoint ¹	438,266	1,352	30.8
O-P-C	231,244	711	30.7
Albemarle	182,541	529	29.0
Five County	234,180	678	29.0
Smoky Mountain	522,576	1,483	28.4
Johnston	168,825	451	26.7
Mecklenburg	894,219	2,333	26.1
Crossroads	270,755	672	24.8
Piedmont	739,735	1,736	23.5
Guilford	476,831	1,018	21.3
Wake	900,342	1,810	20.1
Total	9,398,080	29,670	31.6

Notes

1. The data provided does not reflect the change effective July 2009 when Rockingham County moved from Alamance-Caswell-Rockingham to CenterPoint. This will be corrected in future reports.

2. Source: July 2009 Projected Population, NC Office of State Budget and Management (OSBM), State Demographics Branch website: http://www.osbm.state.nc.us/demog/countytotals_singleage_2009.html. Last Update: April 24, 2009. Downloaded 7/31/09.

MH/DD/SA Admission Rates by County

Table 5 presents data on admission rates by county for emergency department admissions with a primary or secondary diagnosis of mental health, developmental disabilities, or substance abuse. The data in this table is sorted alphabetically by county.

This table shows for each county the number of admissions that occurred during the quarter, population estimates at the beginning of the state fiscal year, and the admission rate per 10,000 population for individuals with a primary or secondary diagnosis related to mental health, developmental disabilities, or substance abuse.

There was considerable variation in admission rates across counties ranging from 38.1 to 317.1 admissions per 10,000 population.

**Table 5: Admission Rates by County
For Admissions With a Primary or Secondary MH/DD/SA Diagnosis
October 1-December 31 2009**

County	Population¹	Admissions	Rate Per 10,000 Population
Alamance	149,401	2,500	167.3
Alexander	37,306	584	156.5
Alleghany	11,157	98	87.8
Anson	25,324	482	190.3
Ashe	26,488	202	76.3
Avery	18,301	175	95.6
Beaufort	46,654	608	130.3
Bertie	20,111	253	125.8
Bladen	32,213	422	131.0
Brunswick	106,586	1,547	145.1
Buncombe	231,016	5,253	227.4
Burke	90,337	1,574	174.2
Cabarrus	177,007	2,551	144.1
Caldwell	80,744	1,244	154.1
Camden	9,799	81	82.7
Carteret	63,858	1,824	285.6
Caswell	23,294	184	79.0
Catawba	157,073	2,943	187.4
Chatham	62,471	388	62.1
Cherokee	27,225	317	116.4
Chowan	14,722	259	175.9
Clay	10,576	110	104.0
Cleveland	98,892	3,136	317.1
Columbus	55,076	836	151.8
Craven	98,488	2,355	239.1

*NC Division of Mental Health, Developmental Disabilities, and Substance Abuse Services
Community Hospital Emergency Department Admissions, Second Quarter, SFY 2009-10*

County	Population¹	Admissions	Rate Per 10,000 Population
Cumberland	319,883	4,415	138.0
Currituck	23,334	164	70.3
Dare	33,442	423	126.5
Davidson	160,963	1,926	119.7
Davie	41,685	357	85.6
Duplin	54,005	618	114.4
Durham	267,492	2,812	105.1
Edgecombe	51,599	732	141.9
Forsyth	349,569	4,468	127.8
Franklin	58,999	674	114.2
Gaston	209,516	5,238	250.0
Gates	11,706	64	54.7
Graham	8,133	101	124.2
Granville	56,620	546	96.4
Greene	21,360	258	120.8
Guilford	476,831	3,179	66.7
Halifax	55,135	953	172.8
Harnett	113,001	1,342	118.8
Haywood	57,430	1,066	185.6
Henderson	105,630	1,193	112.9
Hertford	23,679	194	81.9
Hoke	45,602	461	101.1
Hyde	5,485	44	80.2
Iredell	158,396	2,019	127.5
Jackson	37,551	388	103.3
Johnston	168,825	1,989	117.8
Jones	10,305	187	181.5
Lee	58,709	766	130.5
Lenoir	57,431	969	168.7
Lincoln	76,552	1,545	201.8
Macon	34,847	290	83.2
Madison	21,053	370	175.7
Martin	23,783	492	206.9
McDowell	45,149	909	201.3
Mecklenburg	894,219	8,372	93.6
Mitchell	16,044	256	159.6
Montgomery	27,777	438	157.7
Moore	86,905	1,533	176.4
Nash	95,163	709	74.5
New Hanover	194,914	2,715	139.3

*NC Division of Mental Health, Developmental Disabilities, and Substance Abuse Services
Community Hospital Emergency Department Admissions, Second Quarter, SFY 2009-10*

County	Population¹	Admissions	Rate Per 10,000 Population
Northampton	21,093	299	141.8
Onslow	178,204	2,190	122.9
Orange	131,155	1,331	101.5
Pamlico	12,884	201	156.0
Pasquotank	41,381	628	151.8
Pender	53,550	385	71.9
Perquimans	13,193	184	139.5
Person	37,618	706	187.7
Pitt	159,354	1,949	122.3
Polk	19,009	112	58.9
Randolph	142,871	1,691	118.4
Richmond	46,913	1,049	223.6
Robeson	131,610	2,647	201.1
Rockingham	91,926	1,171	127.4
Rowan	140,891	1,485	105.4
Rutherford	64,257	1,296	201.7
Sampson	66,461	955	143.7
Scotland	37,397	503	134.5
Stanly	60,268	630	104.5
Stokes	47,012	572	121.7
Surry	73,807	1,516	205.4
Swain	14,146	160	113.1
Transylvania	31,358	314	100.1
Tyrrell	4,290	28	65.3
Union	200,606	1,733	86.4
Vance	43,529	336	77.2
Wake	900,342	8,711	96.8
Warren	19,897	122	61.3
Washington	13,112	50	38.1
Watauga	45,901	335	73.0
Wayne	116,314	2,090	179.7
Wilkes	67,622	536	79.3
Wilson	79,962	1,197	149.7
Yadkin	38,552	330	85.6
Yancey	18,754	271	144.5
State	9,398,080	122,814	130.7

Notes

1. Source: July 2009 Projected Population, NC Office of State Budget and Management (OSBM), State Demographics Branch website: http://www.osbm.state.nc.us/demog/countytotals_singleage_2009.html. Last Update: April 24, 2009. Downloaded 7/31/09.

Disposition of MH/DD/SA Admissions

Table 6 presents data on the disposition of admissions with a primary or secondary diagnosis of mental health, developmental disabilities, or substance abuse. Overall, one-third (33.4%) were admitted to the hospital (ICU, Psych Unit, or Other Unit). Almost three-fifths (58.0%) of admissions were discharged from the emergency department. The remaining 8.6% had one of the other dispositions listed.

**Table 6: Disposition of Admissions with a
Primary or Secondary Diagnosis of MH/DD/SA
October 1 - December 31, 2009**

Disposition	Mental Health		Developmental Disabilities		Substance Abuse		Total MH/DD/SA	
	Number	%	Number	%	Number	%	Number	%
Admitted to ICU	490	0.5%	66	0.9%	253	0.9%	809	0.6%
Admitted to Psych Unit	2,611	2.7%	115	1.5%	1,113	3.8%	3,839	2.9%
Admitted to Other Unit	28,621	29.3%	2,050	26.7%	9,508	32.8%	40,179	29.9%
Observation	762	0.8%	39	0.5%	288	1.0%	1,089	0.8%
Transferred ¹	5,408	5.5%	226	2.9%	1,595	5.5%	7,229	5.4%
Discharged	57,435	58.9%	5,060	66.0%	15,344	52.9%	77,839	58.0%
Died	166	0.2%	0	0.0%	28	0.1%	194	0.1%
Left AMA	942	1.0%	41	0.5%	501	1.7%	1,484	1.1%
Left Without Advice	336	0.3%	16	0.2%	167	0.6%	519	0.4%
Other ²	396	0.4%	15	0.2%	138	0.5%	549	0.4%
Unknown	405	0.4%	37	0.5%	91	0.3%	533	0.4%
Grand Total	97,572	100.0%	7,665	100.0%	29,026	100.0%	134,263	100.0%

Notes

1. Includes transfer to prison, jail, general hospital, another type of institution, or to home care.
2. Other category is not clearly defined.

Appendix A: Community Hospitals Reporting Data

County	Town	Hospital
Alamance	Burlington	Alamance
Alexander	Taylorsville	Frye Alexander
Alleghany	Sparta	Alleghany
Anson	Wadesboro	Anson
Ashe	Jefferson	Ashe
Avery	Linville	Charles A. Cannon
Beaufort	Washington	Beaufort
Beaufort	Belhaven	Pungo
Bertie	Windsor	Bertie
Bladen	Elizabethtown	Bladen
Brunswick	Supply	Brunswick
Brunswick	Southport	Dosher
Buncombe	Asheville	Mission
Burke	Morganton	Grace
Burke	Valdese	Valdese
Cabarrus	Concord	Northeast
Caldwell	Lenoir	Caldwell
Carteret	Morehead City	Carteret
Catawba	Hickory	Catawba Valley
Catawba	Hickory	Frye
Chatham	Siler City	Chatham
Cherokee	Murphy	Murphy
Chowan	Edenton	Chowan
Cleveland	Shelby	Cleveland
Cleveland	Kings Mountain	Kings Mountain
Columbus	Whiteville	Columbus
Craven	New Bern	Craven
Cumberland	Fayetteville	Cape Fear Valley
Dare	Nags Head	Outer Banks
Davidson	Lexington	Lexington
Davidson	Thomasville	Thomasville

Appendix A: Community Hospitals Reporting Data

County	Town	Hospital
Davie	Mocksville	Davie
Duplin	Kenansville	Duplin
Durham	Durham	Duke
Durham	Durham	Durham Regional
Edgecombe	Tarboro	Heritage
Forsyth	Winston-Salem	Forsyth
Forsyth	Winston-Salem	NCBH
Franklin	Louisburg	Franklin
Gaston	Gastonia	Gaston
Granville	Oxford	Granville
Guilford	High Point	High Point
Guilford	Greensboro	Moses Cone
Guilford	Greensboro	Wesley Long
Halifax	Roanoke Rapids	Halifax
Halifax	Scotland Neck	Our Community
Harnett	Dunn	Betsy Johnson
Haywood	Clyde	Haywood
Henderson	Hendersonville	Margaret Pardee
Henderson	Fletcher	Park Ridge
Hertford	Ahoskie	Roanoke Chowan
Iredell	Statesville	Davis
Iredell	Statesville	Iredell
Iredell	Mooresville	Lake Norman
Jackson	Sylva	Harris
Johnston	Smithfield	Johnston
Lee	Sanford	Central Carolina
Lenoir	Kinston	Lenoir
Lincoln	Lincolnton	Lincoln
Macon	Franklin	Angel
Macon	Highlands	Highlands
Martin	Williamston	Martin

Appendix A: Community Hospitals Reporting Data

County	Town	Hospital
McDowell	Marion	McDowell
Mecklenburg	Charlotte	CMC
Mecklenburg	Charlotte	CMC Mercy
Mecklenburg	Charlotte	CMC Pineville
Mecklenburg	Charlotte	CMC University
Mecklenburg	Charlotte	Presbyterian
Mecklenburg	Huntersville	Presbyterian Huntersville
Mecklenburg	Matthews	Presbyterian Matthews
Mitchell	Spruce Pine	Blue Ridge Regional
Montgomery	Troy	FHS Montgomery
Moore	Pinehurst	FHS Moore
Nash	Rocky Mount	Nash
New Hanover	Wilmington	New Hanover
Onslow	Jacksonville	Onslow
Orange	Chapel Hill	UNC Hospitals
Pasquotank	Elizabeth City	Albemarle
Pender	Burgaw	Pender
Person	Roxboro	Person
Pitt	Greenville	Pitt
Polk	Columbus	St Luke
Randolph	Asheboro	Randolph
Richmond	Rockingham	FHS Richmond
Richmond	Hamlet	Sandhills
Robeson	Lumberton	Southeastern
Rockingham	Reidsville	Annie Penn
Rockingham	Eden	Morehead
Rowan	Salisbury	Rowan
Rutherford	Rutherfordton	Rutherford
Sampson	Clinton	Sampson
Scotland	Laurinburg	Scotland
Stanly	Albemarle	Stanly

Appendix A: Community Hospitals Reporting Data

County	Town	Hospital
Stokes	Danbury	Stokes Reynolds
Surry	Elkin	Hugh Chatham
Surry	Mt. Airy	Northern Surry
Swain	Bryson City	Swain
Transylvania	Brevard	Transylvania
Union	Monroe	Union
Vance	Henderson	Maria Parham
Wake	Raleigh	Duke Raleigh
Wake	Raleigh	Rex
Wake	Apex	WakeMed Apex
Wake	Cary	WakeMed Cary
Wake	Raleigh	WakeMed North
Wake	Raleigh	WakeMed Raleigh
Washington	Plymouth	Washington
Watauga	Blowing Rock	Blowing Rock
Watauga	Boone	Watauga
Wayne	Goldsboro	Wayne
Wilkes	North Wilkesboro	Wilkes
Wilson	Wilson	Wilson
Yadkin	Yadkinville	Hoots

Appendix B: Data Source

What is NC-DETECT?

The North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT) is the Web-based early event detection and timely public health surveillance system in the North Carolina Public Health Information Network. NC DETECT uses the CDC's CUSUM algorithms from the Early Aberration Reporting System (EARS) to monitor several data sources for suspicious patterns. The reporting system also provides broader public health surveillance reports for emergency department visits related to hurricanes, injuries, asthma, vaccine-preventable diseases, occupational health and others.

Who develops and manages NC-DETECT?

Staff at the UNC Department of Emergency Medicine (UNC DEM), under contract to the North Carolina Division of Public Health (NC DPH) develop and manage NC DETECT. UNC DEM collaborates with NC DPH on all aspects of NC DETECT development.

How is NC DETECT related to NCHESS?

Data from the North Carolina Hospital Emergency Surveillance System (NCHESS) are loaded into NC DETECT (which was formerly known as the North Carolina Bioterrorism and Emerging Infection Prevention System, NC BEIPS). The NC DETECT team at the UNC Department of Emergency Medicine monitors the quality of the NCHESS data and work with hospitals, their vendors and the North Carolina Hospital Association (NCHA) to ensure NC DETECT users have access to the most accurate data possible.

How have North Carolinians benefited from NC DETECT?

With NC DETECT, public health officials at the local, regional and state levels are able to monitor a variety of important public health issues in a secure and timely fashion, including influenza, post-hurricane health issues, injury and violence, and vaccine-preventable disease surveillance. For example, NC DETECT users have monitored illness and injury effects after hurricanes Isabel and Ophelia, analyzed ED use at select hospitals by Katrina evacuees, and uncovered unreported cases of tuberculosis. Before NC DETECT, similar surveillance was either simply not performed, relied on manual, redundant data entry, or had a considerable time lag. A summary of specific NC DETECT outcomes is also available. Since NC DETECT is designed to uncover suspicious patterns of illness in both human and animal populations, it is a key tool in the early detection of emerging infectious diseases, such as new strains of influenza.

Who pays for NC DETECT?

NC DETECT is funded from federal bioterrorism grants administered through the Centers for Disease Control and Prevention and disbursed by the North Carolina Department of Health and Human Services, Division of Public Health.

For more Information: ncdetect@listserv.med.unc.edu, (919) 843-2361

Appendix C: ICD-9 codes

ICD-9 codes that are used to categorize each of the three disabilities are listed below. The International Statistical Classification of Diseases and Related Health Problems (most commonly known by the abbreviation ICD) provides codes to classify diseases and a wide variety of signs, symptoms, abnormal findings, complaints, social circumstances and external causes of injury or disease.

ICD-9 Code Grouping	Description of Category
Mental Health	
290.00- 290.99	Dementia/Delusional psychosis
293.00-293.99	Organic delirium/delusions
294.00-294.99	Dementia/Organic brain syndrome
295.00-295.99	Schizophrenia
296.00-296.99	Manic depressive disorder
297.00-297.99	Paranoia
298.00-298.99	Unspecified psychosis
299.00-299.99	Childhood psychosis
300.00-300.99	Neurotic disorders
301.00-301.99	Personality disorder
302.00-302.99	Psychosexual disorders
306.00-306.99	Physiological malfunction from mental disorders
307.00-307.99	Sleeping order/eating disorder
308.00-308.99	Predominant emotional disturbance
309.00-309.99	Brief/prolonged depressive reaction
310.00-312.99	Conduct disorder
313.00-314.99	Emotional disturbance of childhood or adolescence
799.9	Other MH /unknown/unspecified
995.50-995.89	Child/adult abuse/neglect

ICD-9 Code Grouping	Description of Category
Substance Use and Abuse	
292.00-292.99	Drug induced psychosis
304.00-304.99	Drug dependence
305.20-305.99	Drug abuse
291.00-291.99	Alcohol-related psychosis
303.00-303.99	Alcohol dependence
305.00-305.03	Alcohol abuse
Developmental Disabilities	
315.00-315.99	Developmental disabilities
V79.0-V79.9	Range of DD early childhood/DD- unspecified
314.01	Hyperkinesias with DD
740-759	Congenital anomalies
317.00	Mild mental retardation
318.00	Moderate mental retardation
318.10	Severe mental retardation
318.20	Profound mental retardation
319.00	Mental retardation, severity unspecified

The DMH/DD/SAS Mental Health, Developmental Disabilities and Substance Abuse Related Admissions in Community Emergency Departments, Quarterly Report is published four times a year.

All reports are available on the Division's website:

<http://www.ncdhhs.gov/mhddsas/statpublications/reports/>

Questions and feedback should be directed to:

NC DMH/DD/SAS Quality Management Team

ContactDMHQuality@dhhs.nc.gov

Or

(919)-733-0696